Pre-Natal Fitness

Robins Physical Therapy Department

Outline

- Benefits
- ACOG Guidelines
- Warning Signs
- Exercise Prescription
- Injury Prevention Exercises

Pre-Natal Fitness

Please contact your physician before beginning or continuing an exercise program!

Exercise Benefits for the Mother

- Prevents and reduces common discomforts of pregnancy
- Maintains physical fitness and helps to prepare for labor and delivery
- Helps to prevent fatigue and gives energy for daily activities
- Improves control of weight gain
  - 5 years post-birth weight remains at pre-pregnancy level
- Improves control of gestational diabetes

Exercise Benefits for the Mother

- Improves digestion and reduces constipation
- Reduces “ Postpartum Belly”
- Provides a psychological “lift” that helps counteract the feeling of stress, anxiety, and/or depression the frequently occur during pregnancy
- Potentially contributes to shorter active labor
- Fewer cesareans (6.7% vs. 28.1%)

Possible Short Term Effects of Exercise

- During Exercise
  - Slight decrease in uterine blood flow.
    - After exercise, blood flow quickly returns to normal.
  - Body temperature rises, the temperature of fetus rises
  - Glucose uptake by the uterus increases, but fetal metabolism does not seem to be affected

- To date there are no short or long term fetal problems associated with women who continued to exercise during a non-complicated pregnancy

Exercise Benefits for the Baby

- Possible decreased distress in labor/birth
- Possible increased nourishment in utero, due to larger placenta
- Lower body fat/more lean muscle at birth

- Longitudinal birthstudies show at 1
  year these babies did significantly
  better than controls on

Benefits Of Postnatal Exercise

- Prevents development of chronic postpartum problems such as
  - urinary incontinence
  - back and pelvic pain
  - poor abdominal strength
- Reduces the incidence of fatigue and depression
- Enables women to return more quickly to their normal lifestyle

Guidelines from American College of Obstetricians and Gynecologists

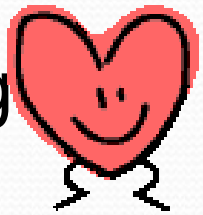
- Regular exercise at least 3 times per week
- Women who lead sedentary life styles should begin at very low intensity and advance very gradually
- Exercise should be preceded by a 5 minute muscle warm-up and end with a 5 minute cool-down

ACOG Guidelines

- Avoid vigorous exercise during hot and humid weather
- Avoid exercises that employ the valsalva maneuver
- Avoid deep flexion or extension of joints
- Avoid ballistic movements (bouncy movements)
- Avoid activities requiring advanced coordination and balance
- Avoid activities with potential of abdominal trauma (even if mild)
- Do not exercise to exhaustion

ACOG Guidelines

- Liquids should be taken liberally before, during and after exercise to prevent dehydration
- Be aware of symptoms of hypoglycemia (low blood sugar). Eat a complex carbo snack before exercise to help prevent this.
- Maternal core temperature should not exceed 101°F during exercise
- Max HR should not exceed 2x Resting
- Listen to your body!!



Warning Signs

- Absent fetal movements
- Uterine Contractions
- Vaginal bleeding or fluid loss
- Difficulty walking
- Pain while exercising
- Pubic pain
- Back pain
- Dizziness
- Shortness of breath
- Tachycardia
- Palpitations
- Chest Pain
- Faintness

Aerobic Prescription During Pregnancy

- **Frequency:** 3 to 5 days per week
- **Intensity:** “somewhat hard”; heart rate <140 bpm
- **Time:** 20 to 45 minutes
- **Type:** Moderate aerobic exercises

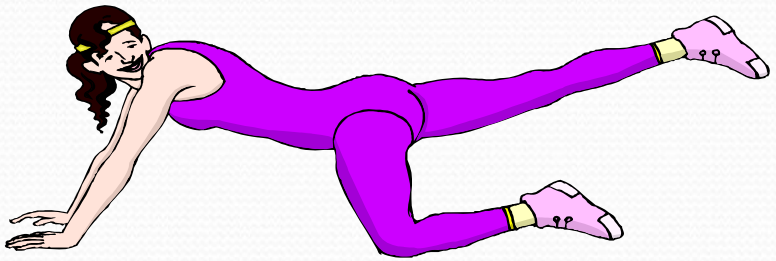
Strength Training During Pregnancy

- Always warm-up
- Use all major muscle groups
- Progress slowly; 1-2 sets, 8-12 reps, 2-3 times per week
- Soup cans, lightweight dumbbells or resistance bands
- Avoid any exercises while on back aft trimester
- Stop if experiencing severe pain or discomfort

INJURY PREVENTION EXERCISES

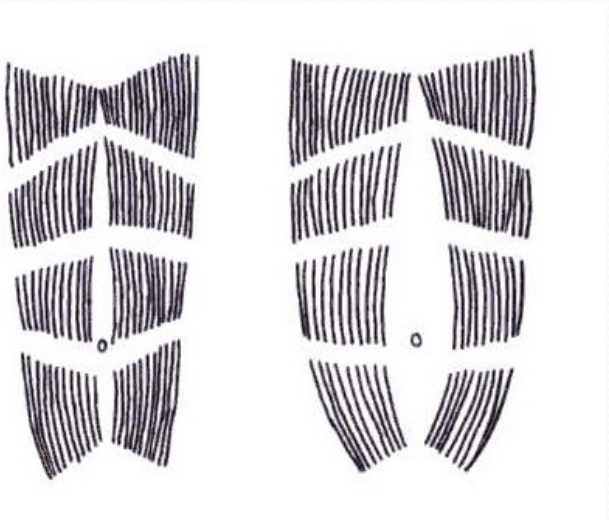
Pelvic/Abdominal Strengthening

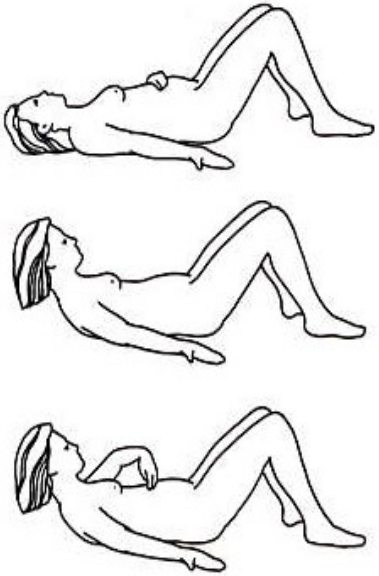
- Important to supporting organs and baby
- Prevents back instability and pain
- Check with doctor before doing abdominal exercises
- Modify exercises by lying on side or propping on hands & knees.

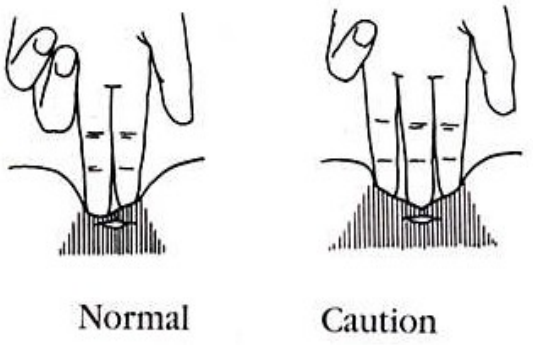


Pelvic/Abdominal Strengthening

- Continually check for “diastasis recti” or separation of the abdominal wall by greater than 2 fingers







Kegel Exercises

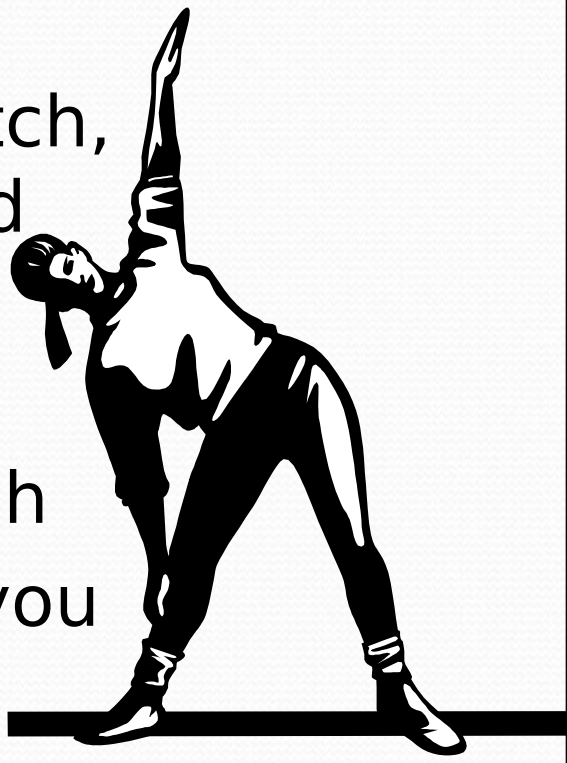
- Strengthen pelvic floor muscles
- Goal: 10 sec x 5 sets, 3 times per day.
- “Stop the flow of urine”
- Don’t contract you “abs”

Flexibility

- Counteracts muscle cramping or muscle soreness and relaxes the lower back
- Allows maximal coordination possible
- Aids in maintaining proper joint alignment
- Improving range of motion is **NOT** the primary focus during pregnancy
- Leg cramps are a common problem
  - If persists, contact Physician or OB-Gyn!!

Flexibility Guidelines

- Hold stretch for 15-30 seconds x 2 reps
- Exhale as you move into the stretch, then breathe normally as you hold the stretch
- Slow gentle movements
- Avoid bouncing or forcing a stretch
- Avoid any exercise that requires you to lie on your back after the 1st trimester



Summary

- Benefits – Mother and Baby
- Guidelines
  - General
  - Aerobic
  - Strength Training
- Warning Signs
- Injury Prevention Exercises
  - Abdominal Strengthening
  - Kegels
  - Flexibility
- Remember: modify the fitness program to fit your needs

QUESTIONS?